

# The Coyotelog

AF Outstanding Unit - 2000, 1985, 1979

The Monthly Newsletter of the 190th Air Refueling Wing

Vol. 46, No. 1 October 2003

## History of aerial refueling: The early years

**By Senior Master Sgt. Keith Fulton**  
*190<sup>th</sup> Operations Group*

As everyone knows Wilbur and Orville Wright completed their famous flight at Kitty Hawk, NC on December 8, 1903. To help commemorate the 100<sup>th</sup> anniversary of powered flight, the 80<sup>th</sup> anniversary of the first air-to-air refueling, and the 25<sup>th</sup> year of our unit's refueling mission with the KC-135 this article is about the early years of aerial refueling as the "flying machines" were coming of age.

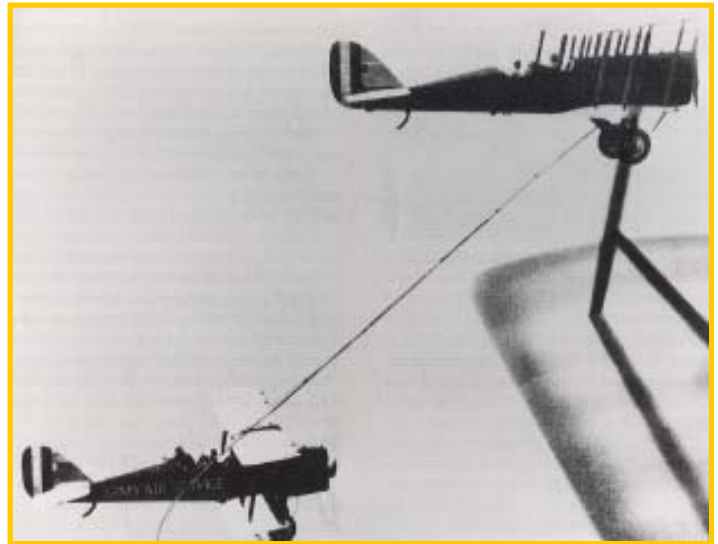
During the First World War several aviators considered the idea of refueling airplanes in-flight. In 1917 Alexander Seversky of the Imperial Russian Navy, proposed a method for increasing the endurance of fighter aircraft. The next year he left Russia and later immigrated to the United States where, in 1921, was the first to apply for an air refueling patent.

In 1918, Lt. Godfrey L. Cabot, a U.S. Navy Reserve pilot, developed a system to snare cans of gasoline that he pre-positioned on floats. This was a test for his ultimate plan of placing fuel on ships in such a way that aircraft could pick the cans up to be used on non-stop transatlantic flights. A modified version of his pickup method was used by the mail ser-

vice for several years. His successes would provide the necessary seeds from which the concept of in-flight refueling would grow.

The first recorded attempt to transfer fuel from one airplane to another was more of a daredevil stunt than a milestone in aviation history. On Nov 21, 1921 Wesley May conducted a death-defying wing walk from the wing of a Lincoln Standard to the wing skid of a Curtiss JN-4 (Jenny). May had a five-gallon can of fuel strapped to his back and when safely aboard the Jenny poured the fuel into the gas tank.

In 1923 Capt Lowell Smith and Lt. John Richter were engaged in flying air patrols along the U.S. - Mexican border. They found the short flights and frequent landings for fuel an irritant. Capt Smith suggested to his boss, Maj. Henry "Hap" Arnold the possibility of refueling planes in the air. Ready to try anything to enhance the cause of aviation, Arnold told Smith to work out a plan. They



**First true air refueling**

Dehavilland DH-4s used in first air refueling test.

engaged the assistance of Lt. Virgil Hines and Lt. Frank Seifert, as the "tanker crew", and conducted two months of test trials. Note: The terms "tanker" and "receiver" were not used until much later but for simplicity these terms are used to help describe the various refueling processes.

On June 27, 1923 the first true air-to-air refueling took place. The tanker crew flying a Dehavilland DH-4 wrestled with the heavy 40-foot hose, which had been coiled around their feet. The tanker approached the other DH-4 (the receiver) from above and behind trailing the hose. The crewmember seated in the rear

[See REFUELING - Page 3](#)

# Training crucial to 190th mission

**By Col. Deborah Rose**

*190<sup>th</sup> Mission Spt Grp Commander*

Just how important is training to our Wing? Without personnel qualified in their duty AFSCs our units cannot provide warfighters to the Combatant Commanders, our capability rating will decrease, and it could impact whether our Wing remains viable.

The importance of completing both CDCs and the Career Field Education and Training Plan (CFETP) are crucial to our unit members becoming fully qualified. Ensuring the completion of upgrade training is the responsibility of the unit member, the supervisor, the training manager/monitor, and the unit commander.

The member has to assume responsibility for completing their CDCs in the time period stated. The member has to study and ask questions in those areas they do not understand. They also need to make sure they are receiving the hands-on training required for their CFETP.

The supervisor's responsibility is to ensure the member completes the CDCs in the time allotted, assign a trainer for their CFETP and ensure training is being completed.

The training manager/monitor monitors the CDCs, ensures the correct CFETP is being used, and ensures progress of the member. **The commander has overall responsibility of the training program** and receives a monthly briefing from

the training manager/monitor. For a drill status training manager/monitor this is a very difficult responsibility.

I had the good fortune to be assigned to aircraft maintenance for a short period of time. During my tenure there I was exposed to the value aircraft maintenance places on training by the fact that they have a full-time training manager assigned.

When I became the Mission Support Group Commander it was my vision to assign a full-time training manager for the group. Fortunately the Wing Commander saw the value of my vision and allowed me to hire that position.

My vision of a Mission Support Group training manager was a full-time person to manage training issues for the squadrons and flights in the Group, and allow unit training managers and monitors to be more productive on UTA weekends.

When I first joined the 190<sup>th</sup> I was assigned to the clinic, and I observed first hand how difficult it was for a drill status training manager to have a functional program. There were just not enough hours in the day to complete all of their duties.

The Group training manager has the ability to pull together all the resources needed by the unit training manager, provide training, order CDCs, contact external organizations,



Col. Deborah Rose  
190th Mission Support Group Commander

and develop the Air Force Training Program.

It has been one year that our program has been operational. In that time period there has been a 29 percent increase in the pass rate of CDCs. Nine unit training managers have received training and have resource material for each area for which they are responsible. Fifty-four trainers and supervisors have attended the Air Force Training Course. All in all, it has been a very productive year in the office.

My new vision is to take our success story to the rest of the ANG and work to provide a training manager for every Mission Support Group. If the mission of the full-time workforce is to provide training for the drill status guardsman, I believe that the addition of a Mission Support Group Training Manager is definitely worthwhile.

## REFUELING - from page 1

cockpit of the receiver aircraft would grasp the hose and then place it into the gas tank filler neck. These aircraft made two contacts that day transferring a total of 75 gallons; the receiver remained airborne for 6 hours and 39 minutes. Impressed with their accomplishments the next day they flew for 23 hours 48 minutes transferring 308 gallons of fuel and 15 gallons of oil.

The hazards of air refueling with single engine, propeller aircraft was highlighted when, on November 18, 1923 Lt. P.T. Wagner was killed during a carnival at Kelly Field, TX. During this air refueling demonstration the hose became entangled in the propeller of the receiving aircraft, causing it to crash. As a direct result of this incident air refueling and any development was placed on the back burner and ignored for several years.

In 1928 the U.S. Army Air Service was given the task of developing a more advanced air refueling procedure and put together a team of military aviators to complete an endurance record. With an American built Fokker C-2 tri-motor

named "The Question Mark", the name given because they did not know how long it would remain airborne, the crew consisted of Major Carl "Tooey" Spaatz, Lt. Harry Halverson, Lt. Elwood Quesada, Capt. Ira Eaker, and SSgt R.W. Hooe. Modifications to "The Question Mark" included a hole cut out of the top so a crewmember could grasp the hose and pull it into the aircraft for refueling, extra fuel tanks, and copper plating on top where the refueling hose nozzle could be neutralized from any static charges.

The tankers, two Douglas C-1s designated as (Refueling Plane) RP #1 and RP #2, had two 150-gallon fuel tanks added to supplement its normal fuel carrying capacity. Trap doors were constructed in the bottom so the fifty foot length of hose could be let down. Also a floodlight was mounted on the wheels of the tanker to assist in rendezvousing at night. Radios were not yet developed for use as airborne communications, therefore a system of blackboard messages, written on the side of the tanker aircraft, and hand signals were developed for day operations and flashlight signals and written messages, attached to the hose, for night use. Capt. Ross Hoyt, Lt. Aubrey Strickland, and Lt. Irwin Woodring crewed RP #1; and the crew assigned to RP#2 was Lt. Odas Moon, Lt. Joseph Hopkins, and Lt. Andrew Salter.

The aircraft and systems were tested extensively before the actual record attempt was made. Finally on January 7, 1929 the Question Mark landed (with one engine dead, one faltering, and the third spewing

oil) setting a new endurance record of 150 hours and 40 minutes. The tankers made 33 contacts, 12 at night, offloading 5760 gallons of fuel and 202 gallons of oil.

These efforts and successes sparked a fad throughout the more advanced countries of the world – mainly England, France, Germany, and United States. Several of these record-breaking flights continued. On July 21, 1930 an aircraft named "The Greater St. Louis" took off and remained airborne for 647.5 hours finally landing on August 17, almost a full month.

As the decade of the 1930's progressed only the British had a continuing research and development program. Air-to-air refueling continued to grow and expand; both civilian and RAF military flights conducted routine refuelings on a day-to-day basis. As for the United States, instead of continuing to improve upon the procedures already developed, aerial refueling was shelved.

After WWII the concept of aerial refueling again became of interest to the military when Gen. Curtis LeMay, the commander of the new Strategic Air Command (SAC), wanted his bombers to complete intercontinental missions from the U.S.

A full century has passed since the Wright Brothers first flew. Just 50 years later plans were on the drawing board for the aircraft we fly today, the KC-135 Stratotanker.



The Question Mark refueling over Burbank, CA, January 1929.

*Editor's note: This is the first of a three part series. It will be continued in the November and December 2003 Coyote Logs.*

*Information for this article obtained from the book "Passing Gas: The History of Inflight Refueling" by Major Vernon B. Byrd, a retired KC-135 pilot; and an Internet site U.S. Centennial of Flight Commission by Dwayne A. Day.*



# Operation Kids Camp a summer success

By Tech. Sgt. Greg Burnetta

190<sup>th</sup> Public Affairs

Coyote kids and others attended summer camp in central Kansas this summer.

One hundred and twenty children and grandchildren of current and retired Kansas Army and Air National Guard members attended a summer camp sponsored by the Kansas National Guard. The camp was held at the Army National Guard's Regional Training Institute in Salina from July 15 thru July 19, 2003.

Eleven of those kids belonged to 190 Air Refueling Wing families.

Seven members of the 190 ARW as well as 52 other Kansas Air and Army National Guard members, retired members, and family members volunteered their time to serve as members of the camp staff.

National Guard members who volunteer to be on the staff are placed on active duty orders and receive active duty pay during the camp.

Each summer the Kansas National Guard conducts a kids' summer camp and is open to boys and girls between the ages of nine through twelve. They must be children or grandchildren of current or retired Kansas Air or Army National Guard members.

The kids' camp is an overnight residential style camp providing a week of activities designed to give campers lasting and positive memories.

The purpose of the camp is to promote positive standards and attitudes, instill a sense of patriotism and community, encourage productive citizenship and contribute to the

development of productive life skills and vocations.

It's, also, to encourage long term pursuit of fitness and well being, to encourage all campers to feel good about themselves and their abilities, and to reduce the likelihood of behaviors that put youth at risk.

Another purpose is to help each camper gain an additional understanding of why his or her parent/grandparent serves in the Kansas National Guard.

Daily activities included: arts and crafts, communication exercises, diversity workshops, swimming, fire trucks, drug dogs, helicopters, night vision goggles, military equipment, flag show, a freedom march at Smokey Hill Weapons Range, confidence course, talent show, and the ever popular dance.

Other memory producing activities include sleeping in military bar-

racks or tents, eating in a military dining hall, and visiting National Guard training sites.

Push-ups are a part of the daily routine as a challenge or as a consequence for improper behavior and the campers love them!

Incorporated into these activities is a realistic drug and substance abuse awareness program designed to provide our children with the education needed to meet today's changing and often challenging values.

It takes time, money, and people to be able to provide this camp. Funds come from corporations, Guard families, and camp fees.

190 ARW members who participated in Kids Camp as staff members served as department supervisors and assistant squad leaders.



**Operation Kids Camp Staff**

Pictured: (back row) Tech Sgt Dan Fox, Senior Airman Matt Glenn, (front row). Senior Airman Amanda Slocum, Master Sgt Jean Hager, Master Sgt Karen Green, Sr Master Sgt Gary Wadley and Col. Deborah Rose

*Photo by: 190th Multimedia Support*

[See KIDS CAMP - Page 5](#)

# 190th hosts memorial service for Col. O'Toole

**By 1st Lt. Chris Hill**  
190<sup>th</sup> Public Affairs

The members of the 190<sup>th</sup> Air Refueling Wing along with friends and family of Col. Mike O'Toole gathered on Saturday, September 7, 2003 for a memorial ceremony at Forbes Field.

Those who spoke of the life and accomplishments of Col. O'Toole, all struggling to gather their thoughts and words, were

ultimately united in their expressions – Col. O'Toole will be sorely missed.

As a token of the gratitude the unit had for Col. O'Toole, various gifts were presented to the O'Toole family. Perhaps the most unique gift was unveiled that day by the O'Toole Family. The "Celtic Kansan," the newest piece of nose art at the 190<sup>th</sup> is a tribute to Col. O'Toole and his Irish ancestry.



**Gifts from across the 190th were presented to the O'Toole family**  
*photo by: SrA Mandy Johnson*



**The Celtic Kansan**  
The newest nose art of the 190th is a tribute to Col. O'Toole and his Irish ancestry  
*photo by: SrA Mandy Johnson*

## Continued

### KIDS CAMP - from page 4

Col. Deborah Rose served as the Medical Director. SMSgt Gary Wadley served as the Safety NCOIC. MSgt Jean Hager served on the kitchen staff. MSgt Karen Green served as an emergency medical technician. TSgt Dan Fox, SrA Matt Glenn, and SrA Amanda Slocum all served as assistant squad leaders.

Prior to camp the youth are divided into companies with each being divided into two squadrons. Each squadron has a squad leader and assistant squad leader that are current members of the Kansas National Guard.

Each squadron consists of approximately 15 youth of the same ages and gender. This year there were eight

squads. Squadrons are easily identified by the color of their t-shirts with each squadron having a different color.

Each squadron, also, has a guidon made from a triangle of the same color as their shirts which they decorate. Usually the decorations on the guidon visualize their squadron chant.

This year one of the squads had a dragon on their guidon and had dragon in their chant. The squads march everywhere on KSRTI marching to the cadences taught to them by their squad leaders.

Days are filled with activities. Breakfast is served around 0700 followed by an opening formation.

J.C. Mode has been the camp's First Sergeant for several years and always wears a black shirt. He forms the troops up each morning and

evening with the squads reporting in with their chants. Each squadron tries to out do the previous squadron.

Squads, also, vie for daily streamers for their guidons. Streamers are given for Esprit De Corp, Drill and Ceremony, and Teamwork. Streamers are, also, awarded for Best Guidon, Best Cadence, Most Improved, and Most Streamers.

Operation Kids' Camp is a great opportunity for your children to have a great time while learning about life as a Kansas National Guardsman. Volunteering for Operation Kids' Camp is an uplifting experience. Members who wish to volunteer to serve as a camp staffer should contact his/her Family Readiness coordinator.

**Col. Deborah Rose contributed to this article**

### SENIOR AIRMAN RENEE WOODS



**Organization:** Civil Engineering

**Job title:** Utilities Specialist

**Civilian Job:** Fulltime student at Emporia State majoring in Biology and Spanish

**Main Responsibilities:** Maintenance on plumbing systems

**Education:** 1992 Graduate of Shawnee Heights High School in Topeka, KS

**Military Experience:** Joined the 190th in May of 2002

**Goals and Ambitions:** Do great in school and achieve my bachelors degree.

**Hobbies and Activities:** Fishing, camping and most outdoor activities. Also a part of Christian Challenge; a group that seeks to develop students into the likeness of Christ.

**Most Memorable 190<sup>th</sup> moment:** "During last year's Airshow, I participated as a stage crew member. I will never forget it."

## Coyote Comments

### What is your opinion on the new utility uniform the Air Force is testing?



**TSgt Dotty Westergren**  
**Finance**

"I like the material a lot better and the button-up shirt worn underneath is great to wear at your duty section."



**MSgt John Sanders**  
**Fuel Systems**

"I like the overall uniform and like the option of tucking in your blouse if you want. I particularly like the new cap that is worn."



**SSgt Becky Bodine**  
**Security Forces Squadron**

"I think it would be fine if you were in the Navy."





## Promotions

### AMN

Charles R. Sherman, Maint.



### A1C

Ryan C. Current, CES  
Wayne L. French, SFS  
Daniel W. Hendrix, 117 ARS  
Ashley N. Lockhart, Finance  
Orlando Saucedo, MSF  
Ashley N. Stewart, Medical



### SrA

Michael L. Baker, CES  
Wesley J. Brungardt, Medical  
Peter J. Cross, SFS  
Bryan L. Hall, Weather  
Christopher B. Helms, Weather  
Robert P. Morris, CES  
Randall D. Thomas, Logistics  
Michael R. Weaver, Maint.  
James L. Whisenhunt, Maint.  
Yrral T. White, 117th ARS  
Caroline A. Williams, Weather  
Renee D. Woods, CES



### SSgt

Phillip E. Cockrell Jr., Comm  
Randy J. Stevens, Medical  
Brian E. Williams, CES



### TSgt

Lucas K. Bowden, Maint  
Webster J. Brown, Medical  
Chastity A. Forrest, 117th ARS



### MSgt

Mark O. Mulanax, Maint.



### SMSgt

Larry J. Aldridge, 190 ARW  
Richard A. Dyer, Medical



### LTC

Bruce J. Stewart, MSF



## Reenlistments, Retirements

### Reenlistment/Enlistments

LtCol Kathryn Hulse  
Capt Ingrid Trevino  
SSgt Joseph Blubaugh  
SSgt Randy Stevens  
SRA Peter Cross  
SRA Gary Williams  
A1C Wayne French  
A1C Jared Hartter  
A1C Daniel Hendrix  
A1C Jessica Lacore  
A1C Ashley Stewart  
AMN Charles Sherman

### Retirements

Col Joe Rose  
CMSgt Merlin Arnold  
CMSgt Stephen Mercer  
SMSgt David Manchester  
TSgt Victoria Johnson

## Coyote Cafe Menu

### Saturday October 25

Box Lunches  
(Due to training)

### Sunday October 26

Box Lunches  
(Due to training)

### Hotel for October

Capital Plaza

## Chapel Hours

Protestant: 0800 - 0830

Latter Day Saints: 1100-1130

Catholic: 1345 - 1415

The Chaplain's Office is  
located on the 3rd floor  
of Hangar 662.

### CMSgt Vacancy at State HQ

State Headquarters in Topeka, Kan. has announced the vacancy of the **Human Resource Advisor (HRA)** position.

This position is appointed by The Assistant Adjutant General (Air) and is a member of their staff.

The role of the HRA is to advise command leadership on issues that require recommendations leading to the enhancement of the organization's culture; promoting opportunities for all ANG members to maximize their individual potential for success without regard to their cultural differences.

Mandatory requirements for this position are: Must be E-9 or promotion eligible E-8, must be able to complete the HRA two-week course within 6 months of appointment, able to complete a 3 year appointment.

Send application's to your Wing Commander. Each Wing will forward one nomination to State HQ for selection made by the Assistant Adjutant General (Air). Applications are due to the Wing Commander by close of business November 16, 2003.

Contact Major Kim Smith 720-8473 (DSN) or 785-274-1473 (commercial) with any questions regarding this position.

## JOB OF THE MONTH Civil Engineering Special- ties

### 3E131 - Heating, Ventilation, Air Conditioning and Refrigeration Apprentice

#### MANDATORY:

ASVAB - Mechanical Score - 44 or  
Electronic Score - 33

### 3E231 - Pavements and Construction Equipment Apprentice

#### MANDATORY:

ASVAB - Mechanical Score - 38

### 3E032 - Electrical Power Production Apprentice

#### MANDATORY:

ASVAB - Mechanical Score - 51 or  
Electronic Score - 43

The Following Restaurants will be  
used for Meal Authorization Chits:

**Burger King, Denny's**

Topeka Blvd.

**McDonald's**

3117 Topeka Blvd., 2880 California  
1100 Kansas Ave.

**Holidome**

Gage Blvd.

# The Coyotelog

AF Outstanding Unit - 2000, 1985, 1979



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THE COYOTE LOG  
190TH ARW  
PUBLIC AFFAIRS  
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Learn more about us at  
[www.kansascoyotes.com](http://www.kansascoyotes.com)



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